In accordance with an added feature of the invention, the layer thickness of the semiconductor body has a specific sheet charge density [ρ] ρ_F in a direction z between the pn junction and the second main surface such that:

D1

$$\int_0^W \rho_F(z)dz \le 0.9Q_c \ , \ \rho_F = \int \rho dF$$

in which ρ is the volume charge density, Q_c, the critical breakdown charge, denotes a critical value of the charge quantity Q at which the electrical breakdown is reached, said charge quantity Q being linked to said electric field strength E between said first electrode and said second electrode by the equations

$$\int_0^W \rho_F(z)dz = Q$$ and Poisson's equation $\nabla E = -4\pi\rho$.

The paragraph starting on page 20, line 4 and ending on page 20, line 23 now reads:

The critical value E_c of the field strength is linked to a charge density ρ by Poisson's equation

D2

$$\vec{\nabla}.\vec{E} = -4\pi\rho \ , \qquad (1)$$

so that a relationship with a critical breakdown surface charge Q_c can be derived: